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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,030	09/26/2005	Kenzo Miya	265347US2XPCT	8402
22850 7590 02/28/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER GARNER, ONDRIA L	
			ART UNIT	PAPER NUMBER
			2834	
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE	DELIVERY MODE	
3 MONTHS		02/28/2007	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/28/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/523,030

Applicant(s)

MIYA ET AL.

Examiner

Ondria Garner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 November 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/05/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings were received on 11/16/2006. These drawings are accepted and the objection of the drawings has been withdrawn.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahata et al (5763971) in view of Watanabe et al (20030104246). Takahata discloses in figure 2 a superconductive magnetic bearing comprising a stationary bearing portion having an annular superconductor unit 35 provided on a fixed portion 10, and a rotatable bearing portion having an annular permanent magnet unit provided on a rotary portion 31 so as to be opposed to the superconductor unit, the rotary portion 31 being contactlessly supported relative to the fixed portion by the pinning effect of a superconductor constituting the superconductor unit 35, the superconductive magnetic bearing being characterized in that the rotatable bearing portion 31 comprises the annular permanent magnet unit and an annular yoke 34 adjacent to the permanent magnet unit and opposed to the superconductor unit 35, the permanent magnet unit comprises plurality of permanent magnet members 5a, 5b, 5c arranged in superposed layers and the yoke comprising a plurality of yoke members 34 made of a magnetic material (col. 5, line 57 et al) and arranged superposed layers (col. 5, line 25 et al).

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Takahata does not disclose an insulating layer. Watanabe discloses an insulating layer 3,5 provided between each adjacent pair of magnet members 2,4,6 in figure 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to have an insulation layer between the magnets in order to suppress eddy currents in the magnetic bearing.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahata and Watanabe as applied to claims 1 and 3 above, and further in view of Sung et al (6369476). Takahata and Watanabe teach all of the claimed features as discussed above. Takahata and Watanabe do not teach the superconductor comprising a plurality of superconductor bulks. Sung teaches in figure 7A, a superconductor unit comprising a plurality of circumferentially divided superconductor bulks 105. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the superconductor unit comprise a plurality of bulks in order to prevent the escape of the rotating members and thus offsetting the force such as the weight using magnetic pressure.

Response to Arguments

Applicant's arguments filed 11/16/2006 have been fully considered but they are not persuasive. Applicant's arguments concerning the applied art not teaching the limitations of claim 1 are not persuasive. Although the applied art, mainly Takahata, does not **discuss** the features recited in independent claim 1, Takahata does illustrate

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the features in the figures as discussed above and in the previous office action.

Therefor the examiner reaffirms the rejection of claim 1.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5479059, US 6483222, US 5747426 A.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ondria Garner whose telephone number is 571-272-8327. The examiner can normally be reached on Monday through Friday, 8:00 am to 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



OLG
2/12/2007

